UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,850	03/09/2000	Ken-ichi Ohta	862.C1858	2932

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EXAMINER
PARK, CHAN S

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/521,850	OHTA ET AL.
	Examiner	Art Unit	
	CHAN S. PARK	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 February 2005</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-21 and 23-37</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17,20,21 and 23-37</u> is/are rejected.

7)☒ Claim(s) <u>18 and 19</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>09 March 2000</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

TYLER LAMB
PRIMARY EXAMINER

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

2/28/05 has been entered.

Response to Amendment

2.   Applicant's amendment was received on 2/28/05, and has been entered and

made of record. Currently, **claims 1-21 and 23-37** are pending.

Allowable Subject Matter

3.   The indicated allowability of claims 9-17, 20, 34 and 35 is withdrawn in view of

the newly discovered reference(s) to Nguyen et al. U.S. Patent No. 6,377,354

(hereinafter Nguyen). Rejections based on the newly cited reference(s) follow.

Response to Arguments

4.   Applicant's arguments with respect to claims 1-8, 21, 23-33, 36 and 37 have

been considered but are moot in view of the new ground(s) of rejection.

Drawings

5.   Figures 1, 2A & 2B should be designated by a legend such as --Prior Art--

because only that which is old is illustrated. See MPEP § 608.02(g). Corrected

drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action

to avoid abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next

Office action. The objection to the drawings will not be held in abeyance.

6.   The drawings, figures 3, 19 and 32, are objected to because a single output line

from the Rasterizer 14 appears to indicate that there is only one kind of output. Upon

careful review of the original Specification, wherein on page 13, lines 8-14, it is

evidently clear that there are two different kinds of output i.e., bitmap image and

attribute map information. Perhaps, two separate output lines should be directly

connected to the Rasterizer 14. Corrected drawing sheets in compliance with 37 CFR

1.121(d) are required in reply to the Office action to avoid abandonment of the

application. Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is being

amended. The figure or figure number of an amended drawing should not be labeled

as "amended." If a drawing figure is to be canceled, the appropriate figure must be

removed from the replacement sheet, and where necessary, the remaining figures

must be renumbered and appropriate changes made to the brief description of the

several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the generation means of claim 21 must be shown or the feature(s) canceled from the claim(s). The claim states that the attribute map information is generated based on the bitmap image data rendered by the rendering means. At this point, it is unclear if the rendering means and the generation means are two distinct devices. If this is not true and the Rasterizer in the figures represents both the rendering means and the generation means, shouldn't there be a feedback line for generating the attribute map information based on the rendered bitmap image data? Explanation/clarification is respectfully requested from the Specification to clearly support this feature upon correcting the drawings or amending the claims. Detail features of the Rasterizer must be shown in the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

8.   Claim 9 is objected to because of the following informalities:

Line 7, "synthesizing objects" should be -- synthesizing the objects --. Examiner notes that the objects are referring to "the other objects" in line 6.

Line 11, "appending object" should be -- appending the object --.

Appropriate corrections are required for the dependent claims to meet the antecedent basis requirement.

9.   With respect to claims 34 and 35, arguments analogous to those presented for claim 9, are applicable.

10.   Claim 18 is objected to because of the following informalities:

Line 2, "synthesis of first and second synthesis means is" should be --

syntheses of the first and second synthesis means are --;

11.   Claim 21 is objected to because of the following informalities:

Line 3, "inputting image data" should be -- inputting the image data --;

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 20, 21, 31, 32, 33, 36 and 37 are rejected under 35 U.S.C. 112,

second paragraph, as being indefinite for failing to particularly point out and distinctly

claim the subject matter which applicant regards as the invention.

12.   With respect to claim 1, it recites "image processing means for performing an

image process on the bitmap image data in accordance with the attribute information."

It is noted that there are the first bitmap image data and the second bitmap image data

in the claim. It is unclear as to which of the two bitmap information "the bitmap image

data" is referring to. Further, it is noted that there are the attribute information of the

first bitmap image data, the attribute information of the second bitmap image data, and

the synthesized attribute information. It is unclear as to which of the three attribute

information "the attribute information" is referring to.

13.   With respect to claims 32 and 33, arguments analogous to those presented for

claim 1, are applicable.

14.   With respect to claim 9, it recites "object type information of objects". It is

unclear if "objects" are referring to the other objects recited in line 6 or something else.

If they are referring to the other objects, it is noted that the step of discriminating the

type information of the other objects is omitted as it is required for the second

synthesis means. Perhaps, the "discrimination means" should be recited as --

discrimination means for discriminating a type of each of a plurality of objects in an

image to be rendered --. Further, it is questionable as to whether one single image is

represented by a plurality of objects or a single object. Explanation/clarification is

respectfully requested.

15.   With respect to claims 34 and 35, arguments analogous to those presented for

claim 9, are applicable.

16.   Claim 20 recites the limitation "the synthesis". There is insufficient antecedent

basis for this limitation in the claim. It is unclear if it refers to the synthesis done by the

first or second synthesis means.

17.   Claims 21, 36 and 37 recite the limitation "the type of the command" in line 10.

There is insufficient antecedent basis for this limitation in the claims. This limitation

appears to indicate that there is a determination step of determining a type of the

command, which is apparently omitted in the claims. Explanation/clarification is

respectfully requested from the Specification.

18.   With respect to claim 21, it recites "a command for a bitmap image" and
"rendering the objects into bitmap image data". It is uncertain as whether there is any
difference between the *bitmap image* and the *bitmap image data*. Isn't bitmap image
already in a form of data? If they are different, does that bitmap image get rasterized?
Isn't it already in rasterized form? How is the bitmap image exactly/distinctively
defined in the invention? Explanation/clarification is respectfully requested from the
Specification.

        Furthermore, it recites the limitation "discrimination of **further** discriminating a
character/line image region". It appears that there is another discriminating step
involved in the claim, which is apparently omitted. Explanation/clarification is
respectfully requested from the Specification.

        Furthermore, it claims that the character/line image region is discriminated
based on the attribute map information generated according to the command for the
bitmap image. First, it is unclear as to whether the image area/region is referring to
the image area of the bitmap image data or the area of the unrasterized/original image
data. Second, it is unclear if only the command for the bitmap image is used in
discriminating the character/line image region. Is the command for the character/line
used anywhere in the apparatus? Third, this limitation appears to indicate that both
commands are needed to process the image data. If this is true, the claim should be --
the objects represented by a command for a character/line and a command for a
bitmap image -- in line 4.

With respect to claims 36 and 37, arguments analogous to those presented for claim 21, are applicable.

19.   Claim 31 recites the limitation "said image area separation processing means". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

20.   Claims 33, 35 and 37 are rejected under 35 U.S.C. 101 because "[a] storage medium on which is stored program codes" alone has no set definition. Perhaps, it should be -- A computer readable medium storing a program --.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 6, 8-10, 12, 14, 17, 20, 21, 23-25 and 20-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen.

21.   With respect to claim 1, Nguyen discloses an image processing apparatus comprising:

attribute information generation means for generating attribute information

indicating an attribute of an image in correspondence with a command that represents

the image (steps 118 & 132);

bitmap data generation means for generating bitmap image data by rendering

the command (col. 6, lines 65-67);

attribute synthesis means for, if first and second bitmap image data generated

in accordance with first and second commands overlap each other, synthesizing

attribute information at an overlapped area of the first bitmap image data and attribute

information at an overlapped area of the second bitmap image data in accordance with

a predetermined rule (col. 7, lines 26-61); and

image processing means for performing an image process on the bitmap image

data in accordance with the attribute information (printing of final bitmap image created

in step 142).

22.   With respect to claim 3, Nguyen discloses the apparatus of claim 1, wherein

said bitmap data generation means generates the bitmap image data by overwriting a

rendered bitmap image (col. 7, lines 26-36).

23.   With respect to claim 4, Nguyen discloses the apparatus of claim 1, wherein the

image process is at least one of a dither process and an under color removal process

(col. 7, lines 26-36 & col. 2, lines 46-57).

24.   With respect to claim 6, Nguyen discloses the apparatus of claim 1, wherein the

predetermined rule is one of an AND, OR, overwrite priority, and background priorty

using the attribute information of the first bitmap image and the attribute information of

the second bitmap image (col. 7, lines 26-36 & col. 8, lines 1-28).

25.   With respect to claim 8, Nguyen discloses the apparatus of claim 1, wherein the

attribute information is generated for each pixel and has at least one of vector,

character, and color attribute (col. 8, lines 1-28).

26.   With respect to claim 9, Nguyen discloses an image processing apparatus

comprising:

discrimination means for discriminating a type of object in an image to be

rendered (step 116);

determination means for determining whether or not the discriminated object is

in condition to be synthesized with other objects (step 112);

first synthesize means for synthesizing the objects in accordance with the

determination unit (col. 7, lines 21-61);

second synthesize means for synthesizing object type information of objects

discriminated by said discrimination means (col. 8, lines 1-28); and

processing means for appending the object type information synthesized by

said second synthesis means to a rendering result obtained by rendering the object to

be rendered in units of pixels (step 142).

27.   With respect to claim 10, Nguyen discloses the apparatus according to claim 9,

wherein the type of object to be rendered includes information indicating if an object is

a bitmap or a vector graphic (col. 7, lines 37-61).

28.   With respect to claim 12, Nguyen discloses the apparatus according to claim 9,

wherein the type of object to be rendered includes information indicating if an object is

a character or an object other than the character (step 116).

29.   With respect to claim 14, Nguyen discloses the apparatus according to claim 9,

further comprising image processing means for performing an image process on data

of the rendering result in accordance with the information of the type of object (step

116).

30.   With respect to claim 17, Nguyen discloses the apparatus according to claim 9,

wherein said second synthesis means synthesize the object type information of the

objects in accordance with one of synthesis modes including OR, AND, XOR and α

blend (col. 7, lines 26-36).

31.   With respect to claim 20, Nguyen discloses the apparatus according to claim 9,

wherein the synthesis is done for at least two different objects (fig. 4).

32.   With respect to claim 21, Nguyen discloses an image processing apparatus for

processing and outputting input image data, comprising:

        input means for inputting the image data composed of a plurality of objects, the

objects being represented by at least a command for a character/line or a command

for a bitmap image (col. 6, lines 35-37);

        rendering means for rendering the objects into bitmap image data (col. 6, lines

65-67);

        generation means for generating attribute map information (steps 118 & 132)

indicating a configuration of the bitmap image data on the basis of the bitmap image

data rendered by said rendering means and attributes of the objects, said attributes

being determined based on the type of the command (col. 7, lines 16-61); and

determination means for determining a range of the bitmap image data, which is

to undergo an image area discrimination of further discriminating a character/line

image region, on the basis of the attribute map information which is generated,

according to the command for the bitmap image, by said generating means (step 120

& fig. 3B).

33.   With respect to claim 23, Nguyen discloses the apparatus according to claim

21, wherein the attribute map information includes at least a vector flag and bitmap

flag (col. 8, lines 1-28).

34.   With respect to claim 24, Nguyen discloses the apparatus according to claim

21, wherein the attribute map information is generated in correspondence with two-

dimensional coordinate positions of the bitmap image data (steps 118 & 132 & col. 10,

lines 20-21).

35.   With respect to claim 25, Nguyen discloses the apparatus according to claim

21, wherein said generation means comprises an attribute map memory for storing the

generated attribute map information (col. 7, lines 24-25).

36.   With respect to claim 30, Nguyen discloses the apparatus according to claim

21, wherein said determination means comprises image area separation processing

means for performing an image area separation process for the bitmap image data

(fig. 4 & col. 8, 24-26). Note that the words are separated to perform an appropriate

image processing for the overlap region.

37.   With respect to claim 31, Nguyen discloses the apparatus according to claim

21, wherein said determination means updates the attribute information on the basis of

a processing result of said image area separation processing means (fig. 4 & col. 8,

24-26). Note that the words are separated and updated to perform an appropriate

image processing for the overlap region.

38.   With respect to claims 32 and 33, arguments analogous to those presented for

claim 1, are applicable.

39.   With respect to claims 34 and 35, arguments analogous to those presented for

claim 9, are applicable.

40.   With respect to claims 36 and 37, arguments analogous to those presented for

claim 21, are applicable.

Claim Rejections - 35 USC § 103

        The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented
> and the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

        Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen.

41.   With respect to claim 7, Nguyen disclose the apparatus according to claim 1,

wherein the image is printed by a printer. However, Nguyen does not explicitly

disclose that the printer is either a laser print means or ink-jet print means. Examiner

takes an Official Notice that it is well known in the art that either a laser printer or ink-jet printer is conventionally used in printing the processed image data. Therefore, it would have been obvious to obtain the invention as specified in claim 7.

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen as applied to claim 1 above, and further in view of Miller et al. U.S. Patent No. 6,257,693 (hereinafter Miller).

42.   With respect to claim 2, Nguyen discloses the image processing apparatus according to claim 1, but it does not disclose expressly that the image process is a resolution converting process.

Miller, the same field of the printing of merged objects, discloses an image processing apparatus for merging two or more objects wherein the overlapped area is image processed in accordance with a predetermined rule (col. 9, lines 32-38 & col. 13, lines 33-48). Further, Miller discloses that the image process is a resolution converting process (col. 5, lines 57-67).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the resolution converting process of Miller into the image processing apparatus of Nguyen.

The suggestion/motivation for doing so would have been to provide optimum balance of throughput and print quality.

Therefore, it would have been obvious to one of ordinary skill in the art to obtain the invention as specified in claim 2.

43.   With respect to claim 5, Nguyen discloses the image processing apparatus

according to claim 1, but it does not disclose expressly that the image process is one

of a filter process and compression process.

Miller further discloses that the image process is one of a filter process and

compression process (col. 10, lines 57-64).

At the time of the invention, it would have been obvious to one of ordinary skill

in the art to implement the compression process of Miller into the image processing

apparatus of Nguyen.

The suggestion/motivation for doing so would have been to provide an optimum

print quality.

Therefore, it would have been obvious to one of ordinary skill in the art to obtain

the invention as specified in claim 5.

Claims 11, 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Nguyen as applied to claim 9 above, and further in view of Miller.

44.   With respect to claim 11, Nguyen discloses the apparatus according to claim 9,

but it does not disclose expressly that the type of object to be rendered includes

information indicating if an object is a color or monochrome object.

Miller discloses the apparatus for distinguishing the object types (col. 6, lines

50-67).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the object type information of Miller into the image processing apparatus of Nguyen.

The suggestion/motivation for doing so would have been to determine which color objects touch black objects when they merge.

Therefore, it would have been obvious to one of ordinary skill in the art to obtain the invention as specified in claim 11.

45.   With respect to claim 13, Nguyen discloses the apparatus according to claim 9, but it does not disclose expressly that the type of object to be rendered includes information indicating if an object is a tone or resolution priority object.

Miller discloses the apparatus for indicating if an object is a tone or resolution priority object (col. 15, lines 4-15).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the object type information of Miller into the image processing apparatus of Nguyen.

The suggestion/motivation for doing so would have been to an optimum print quality.

Therefore, it would have been obvious to one of ordinary skill in the art to obtain the invention as specified in claim 13.

46.   With respect to claim 15, Nguyen discloses the apparatus according to claim 9, but it does not disclose expressly that the image process includes a binarization process, filter process, and black character extraction process.

Miller discloses the apparatus for image processing a binarization process, filter

process, and black character extraction process (col. 8, lines 10-12 & col. 6, lines 50-

61).

At the time of the invention, it would have been obvious to one of ordinary skill

in the art to implement the object type information of Miller into the image processing

apparatus of Nguyen.

The suggestion/motivation for doing so would have been to an optimum print

quality.

Therefore, it would have been obvious to one of ordinary skill in the art to obtain

the invention as specified in claim 15.

47.   With respect to claim 16, Miller discloses the image process outputs rendered

data using black alone when it is determined in accordance with information of the

object that the object is a black character (col. 6, lines 50-67).

Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nguyen as applied to claim 21 above, and further in view of Lee et al. U.S. Patent No.

5,748,789 (hereinafter Lee).

48.   With respect to claim 26, Nguyen discloses the apparatus according to claim

21, but it does not disclose that the bitmap image data is managed in units of RGB

planes.

Lee, the same field of endeavor of combining images for printing, discloses an

apparatus for combining images wherein when an overlap region is detected, a

predetermined processing is performed on the region (col. 40, lines 35-53). Further, it teaches when the bitmap image is managed in units of RGB planes, the attribute map information is managed as an attribute map plane added to the RGB planes (col. 42, lines 33-45).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the color object combining method of Lee into the image processing apparatus of Nguyen.

The suggestion/motivation for doing so would have been to correctly image process on the overlap color region.

Therefore, it would have been obvious to combine Nguyen with Lee to obtain the invention as specified in claim 26.

49.   With respect to claims 27-29, arguments analogous to those presented for claim 26, are applicable.

Allowable Subject Matter

50.   Claims 18 and 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

51.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to CHAN S. PARK whose telephone number is (571)
272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the
examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax
phone number for the organization where this application or proceeding is assigned is
703-872-9306.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
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you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Chan S. Park
Examiner
Art Unit 2622

csp
August 17, 2005

TWYLER LAMB
PRIMARY EXAMINER